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FEDERAL - STATE - PRIVATE
COOPERATIVE SNOW SURVEYS

U. S. DEPT. OF AGRICULTURE
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MAY 25 1966

PERMANENT SERIAL RECORDS

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
COLORADO and NEW MEXICO

UNITED STATES DEPARTMENT of AGRICULTURE--SOIL CONSERVATION SERVICE
and
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

AS OF
MAY 1, 1966

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Listed below are water supply outlook reports based on Federal-State-Private Cooperative snow surveys. Those published by the Soil Conservation Service may be obtained from Soil Conservation Service, Room 507, Federal Building, 701 N. W. Glisan, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

| <u>REPORTS</u> | <u>ISSUED</u> | <u>LOCATION</u> | <u>COOPERATING WITH</u> |
|-------------------------------|-------------------------------------|------------------------------|--|
| RIVER BASINS | | | |
| WESTERN UNITED STATES _____ | MONTHLY (FEB.-MAY) _____ | PORTLAND, OREGON _____ | ALL COOPERATORS |
| BASIC DATA SUMMARY _____ | OCTOBER 1 _____ | PORTLAND, OREGON _____ | ALL COOPERATORS |
| STATES | | | |
| ALASKA _____ | MONTHLY (MAR.-MAY) _____ | PALMER, ALASKA _____ | ALASKA S.C.D. |
| ARIZONA _____ | SEMI-MONTHLY (JAN.15 - APR.1) _____ | PHOENIX, ARIZONA _____ | SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION |
| COLORADO AND NEW MEXICO _____ | MONTHLY (FEB.-MAY) _____ | FORT COLLINS, COLORADO _____ | COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER |
| IDAHO _____ | MONTHLY (JAN.-JUNE) _____ | BOISE, IDAHO _____ | IDAHO STATE RECLAMATION ENGINEER |
| MONTANA _____ | MONTHLY (JAN.-JUNE) _____ | BOZEMAN, MONTANA _____ | MONT. AGR. EXP. STATION |
| NEVADA _____ | MONTHLY (JAN.-MAY) _____ | RENO, NEVADA _____ | NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES |
| OREGON _____ | MONTHLY (JAN.-JUNE) _____ | PORTLAND, OREGON _____ | OREG. STATE UNIVERSITY OREGON STATE ENGINEER |
| UTAH _____ | MONTHLY (JAN.-JUNE) _____ | SALT LAKE CITY, UTAH _____ | UTAH STATE ENGINEER |
| WASHINGTON _____ | MONTHLY (FEB.-JUNE) _____ | SPOKANE, WASHINGTON _____ | WN. STATE DEPT. OF CONSERVATION |
| WYOMING _____ | MONTHLY (FEB.-JUNE) _____ | CASPER, WYOMING _____ | WYOMING STATE ENGINEER |

PUBLISHED BY OTHER AGENCIES

| <u>REPORTS</u> | <u>ISSUED</u> | <u>AGENCY</u> |
|------------------------|---------------------------|---|
| BRITISH COLUMBIA _____ | MONTHLY (FEB.-JUNE) _____ | WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA |
| CALIFORNIA _____ | MONTHLY (FEB.-MAY) _____ | CALIF. DEPT. OF WATER RESOURCES, P.O. Box 388, SACRAMENTO, CALIF. |

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS AND WATER SUPPLY FORECASTS
for
COLORADO RIVER, PLATTE RIVER
ARKANSAS RIVER AND RIO GRANDE DRAINAGE BASINS
issued

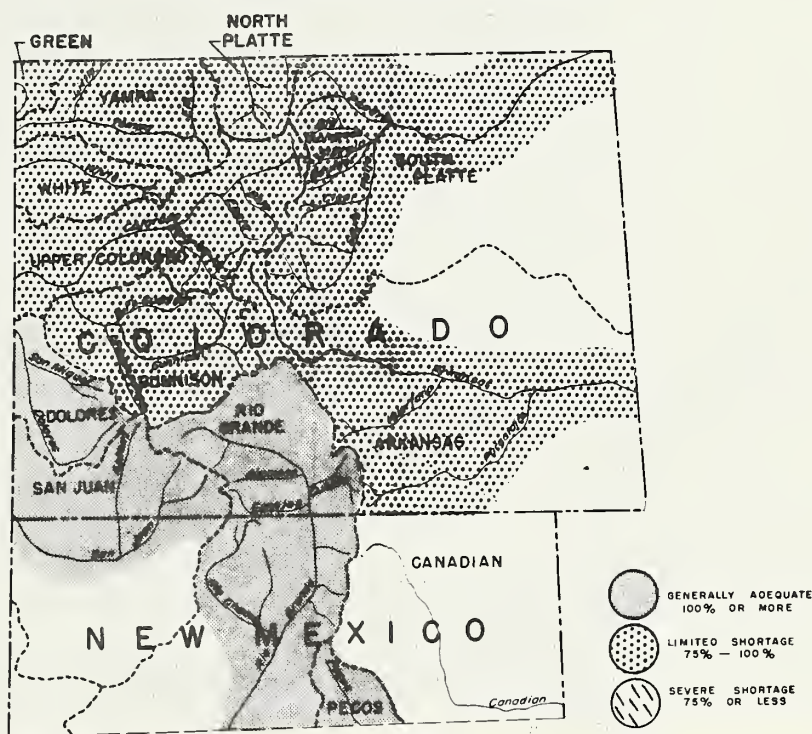
May 1, 1966

Report Prepared By
Jack N. Washichek, Snow Survey Supervisor
and
Don W. McAndrew, Assistant Snow Survey Supervisor
Fort Collins, Colorado

United States Department of Agriculture
Soil Conservation Service
and
Colorado Agricultural Experiment Station
Fort Collins, Colorado

State Engineer of Colorado
Denver, Colorado
and
State Engineer of New Mexico
Santa Fe, New Mexico

WATER SUPPLY OUTLOOK



THE MAP ON THIS PAGE INDICATES THE MOST PROBABLE WATER SUPPLY AS OF THE DATE OF THIS REPORT. ESTIMATES ASSUME AVERAGE CONDITIONS OF SNOW FALL, PRECIPITATION AND OTHER FACTORS FROM THIS DATE TO THE END OF THE FORECAST PERIOD. AS THE SEASON PROGRESSES ACCURACY OF ESTIMATES IMPROVE. IN ADDITION TO EXPECTED STREAMFLOW, RESERVOIR STORAGE, SOIL MOISTURE IN IRRIGATED AREAS, AND OTHER FACTORS ARE CONSIDERED IN ESTIMATING WATER SUPPLY. ESTIMATES APPLY TO IRRIGATED AREAS ALONG THE MAIN STREAMS AND MAY NOT INDICATE CONDITIONS ON SMALL TRIBUTARIES.

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

as of

May 1, 1966



COLORADO - Again this month, Colorado's mountain snow pack did not keep pace with average. Most of the mountain snow pack is sadly deficient. Many of the snow fields have already melted. Even the higher elevation snow cover around the passes melted somewhat during April.

Streamflow forecasts have been reduced again this month. Many of the rivers are expected to flow in the 40 to 50 percent range. The two hardest hit areas are the Arkansas and South Platte. The Rio Grande and San Juan areas are expected to be considerably better while the Colorado River and the Northwest portion of the state will be far below normal.



NEW MEXICO - The Rio Grande and its' main tributaries should flow near normal this summer.

Again this month the snow pack decreased in the headwaters areas of Colorado. The only snow pack areas that remain above normal are the extremely high elevation headwaters areas around Wolf Creek Pass. Mountain soils are wet to saturated throughout the basin and the water stored in the reservoirs remain high.

If summer storms produce average amounts of precipitation, water users throughout the area should have normal or near normal water supplies.

TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I

SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II

ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III

RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.

WATERSHED IV

RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Lower Cebolla, Abiquiu-Vallecitos, Eastern Taos, Lindirith, Coyote-Canones, Espanola Valley, Pojague, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Englewood Soil Conservation Districts.

WATERSHED V

DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin, Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.

WATERSHED VI

GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII

COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII

YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX

LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton Peetz, Padroni, Morgan, Rock Creek and Yuma Soil Conservation Districts.

Hints for Conserving

Your Irrigation Water



R. D. Anderson, State Soil Conservationist, SCS, Denver, Colorado

Charles H. Mitchell, State Conservation Engineer, SCS, Denver, Colorado

Floyd E. Brown, Extension Irrigation Specialist, CSU, Fort Collins, Colorado

YOUR 1966 WATER SUPPLY

ALTHOUGH RESERVOIR STORAGE IS GOOD, STREAMFLOW WILL BE BELOW NORMAL IN MANY AREAS THIS SEASON. IT IS IMPORTANT THAT YOU USE YOUR IRRIGATION WATER AS EFFICIENTLY AS POSSIBLE. BEFORE CROP PLANTING GETS UNDER WAY, FIND OUT FROM YOUR IRRIGATION COMPANY ABOUT HOW MUCH WATER YOU ARE LIKELY TO RECEIVE AND FOR HOW LONG OVER THE SEASON IT WILL BE AVAILABLE. KNOW HOW MUCH WATER IS DELIVERED TO YOUR FARM. TRY TO SAVE STORAGE SUPPLIES UNTIL THE LATER SEASON.

HERE ARE SOME SUGGESTIONS THAT WILL HELP:

IRRIGATION SYSTEMS

1. Keep ditches clean.
2. Replace leaky, worn-out structures such as gates and turnouts.
3. Use short lengths of run.
4. Combine streams on the farm and irrigate with larger heads of water. Reduce heads when water reaches lower end of field.
5. Allow as little waste water as possible. If some waste or tail water is necessary, try to re-use it.

CROPS

1. Give first priority to established perennial crops such as alfalfa, hay, pasture, orchards, etc.
2. Adjust downward acreages of high water requirement crops such as beets, potatoes, onions and corn.
3. Replace some acreages of high water requirement crops with those needing lesser water.

MANAGEMENT

1. If water supply is too short for the whole acreage, concentrate it on the best land.
2. Maintain high fertility on those crops for which irrigation water is available.
3. Use shovel or soil auger to determine when to irrigate. Apply only the amounts needed to fill the root zone by checking with a shovel or auger as you irrigate.
4. Cultivate only as often as necessary to control weeds. Where possible, use chemicals to control weeds.

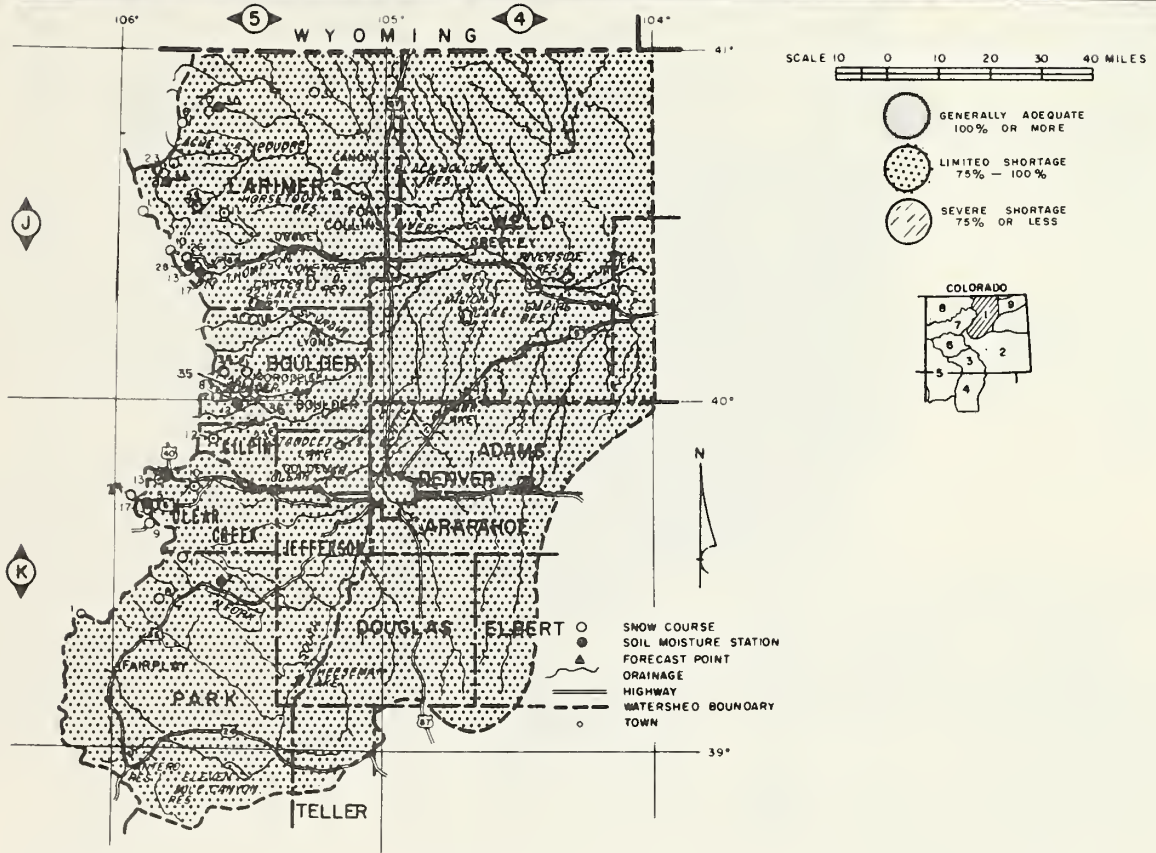
SEE YOUR SOIL CONSERVATION SERVICE TECHNICIAN OR
COUNTY AGENT FOR SPECIFIC HELP IN YOUR LOCALITY.

WATERSHED I

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SOUTH PLATTE RIVER WATERSHED IN COLORADO as of

May 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The South Platte River and its' tributaries have one of the lowest snow packs in recent history. Much of the mountain snow pack has already melted and the high elevation pack is all that remains. The recent snow storm during the third week of April did not improve the mountain snow pack situation. However, it was very beneficial as far as the over-all water supply picture throughout the South Platte valley. Many of the irrigated areas that received the storm will not need to irrigate up the crops. Most of the upper irrigated areas are reporting very good soil moisture while the lower valley around the Sterling area are reporting fair to good soil moisture.

If early season irrigation can be avoided, much precious water can be held in storage until later in the season. This will be an excellent supplement to the river flow.

The streamflow forecasts range from 40% of normal on the St. Vrain to 59% on Boulder Creek.

Much of the success of this year's crop will depend on good and wise use of irrigation supplies and timely rainfall this summer. Forecasts are based on average precipitation for the remainder of the year.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,
Colorado

E. A. Nicholson, Area Conservationist,
Littleton, Colorado

SNOW

| SNOW | | CURRENT INFORMATION | | | PAST RECORD | |
|----------------------------------|------|---------------------|---------------------|------------------------|------------------------|-----------------|
| SNOW COURSE | NO. | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | |
| | | | | | LAST YEAR | AVERAGE 1948-62 |
| South Platte River & Tributaries | | | | | | |
| Baltimore | 5K23 | 5/2 | 0 | 0 | 5.6 | - - |
| Berthoud Falls | 5K13 | 4/27 | 29 | 8.4 | 20.6 | 13.8* |
| Big South | 5J3 | 5/1 | 0 | 0 | 0.3 | 0.8 |
| Boulder Falls | 5J25 | 4/29 | 14 | 5.0 | 19.3 | 13.2* |
| Cameron Pass | 5J1 | 4/28 | 55 | 21.9 | 34.3 | 28.1 |
| Chambers Lake | 5J2 | 5/1 | 0 | 0 | 9.6 | 5.5 |
| Copeland Lake | 5J18 | 4/29 | 0 | 0 | 4.0 | 2.3* |
| Deadman Hill | 5J6 | 4/27 | 37 | 13.0 | 19.0 | 18.1 |
| Deer Ridge | 5J17 | 4/28 | 0 | 0 | 4.6 | 3.5* |
| Empire | 5K10 | 5/2 | 12 | 4.2 | 11.9 | 7.1* |
| Geneva Park | 5K11 | 4/28 | 2 | 0.5 | 6.6 | 1.9* |
| Grizzly Peak (B) | 5K9 | 4/28 | 35 | 10.7 | 28.0 | 21.1 |
| Hidden Valley | 5J13 | 4/28 | 25 | 6.9 | 15.1 | 13.6 |
| Hoosier Pass | 6K1 | 4/29 | 23 | 6.0 | 19.8 | 12.9 |
| Hour Glass Lake | 5J11 | 4/28 | 4 | 1.4 | 9.2 | 7.5 |
| Jefferson Creek | 5K8 | 4/29 | 6 | 1.9 | 12.1 | 8.0* |
| Lake Irene (B) | 5J10 | 4/27 | 43 | 12.0 | 29.2 | 24.7 |
| Long's Peak | 5J22 | 5/1 | 21 | 6.5 | 18.2 | 13.4* |
| Lost Lake | 5J23 | 5/1 | 6 | 1.9 | 13.2 | 10.2* |
| Loveland Lift No. 1 | 5K24 | 4/29 | 53 | 15.1 | 34.2 | - - |
| Loveland Pass | 5K5 | 4/28 | 15 | 4.9 | 21.0 | 16.4 |
| Pine Creek | 5J31 | 4/27 | 0 | 0 | 0.2 | - - |
| Red Feather | 5J10 | 4/27 | 3 | 0.7 | 4.1 | 4.9* |
| Two Mile | 5J26 | 4/28 | 38 | 9.8 | 21.6 | 17.8* |
| University Camp | 5J8 | 4/29 | 24 | 8.2 | 27.2 | 24.9 |
| Ward | 5J21 | 4/27 | 1 | 0.4 | 10.7 | 6.0* |
| Wild Basin | 5J5 | 4/29 | 18 | 5.1 | 17.9 | 14.8 |

STREAMFLOW FORECAST (1,000 AC. FT.)

| APRIL THROUGH SEPTEMBER | | | THIS |
|---------------------------------------|------------------------------|----------------------|--------------------|
| STREAM AND STATION | FORECAST APRIL - SEPT. | YEAR % AVERAGE | AVERAGE 1948-62 |
| Big Thompson at Drake (2) | 50 | 45 | 110 |
| Boulder at Orodell | 32 | 59 | 54 |
| Cache La Poudre at Canon Mouth (1) | 120 | 49 | 246 |
| Clear Creek at Golden (3) | 77 | 57 | 134 |
| Saint Vrain at Lyons | 32 | 40 | 80 |

NOTE: * - 1948-62 (adjusted averages)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by
 Jack N. Washichek and
 Don W. McAndrew
 Soil Conservation Service
 Colorado State University
 Fort Collins, Colorado

- (1) Observed flow minus diversions from Michigan, Colorado and Laramie rivers, plus diversions for irrigation and municipal use above station.
- (2) Observed flow plus by-pass to power plants.
- (3) Observed flow minus diversions through Jones Pass.

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | THIS YEAR | LAST YEAR | 15 YEAR AVERAGE 1948-62 |
|-----------------|-----------------|-----------|-----------|-------------------------|
| Antero | 33.0 | 15.9 | 0 | 13.4 |
| Barr Lake | 32.2 | 28.3 | 16.0 | 24.7 |
| Black Hollow | 8.0 | 4.1 | 2.4 | 3.3 |
| Boyd Lake | 58.0 | 40.6 | 26.6 | 20.8 |
| Cache La Poudre | 9.5 | 9.0 | 8.3 | 7.7 |
| Carter Lake | 108.9 | 107.3 | 95.4 | 79.0 |
| Chambers Lake | 8.8 | 6.7 | 3.9 | 2.8 |
| Cheeseman | 79.0 | 77.2 | 29.0 | 54.3 |
| Cobb Lake | 34.3 | 7.3 | 5.6 | 9.2 |
| Eleven Mile | 81.9 | 92.3 | 30.0 | 74.6 |
| Fossil Creek | 11.6 | 10.1 | 6.0 | 7.1 |
| Gross | 43.1 | 24.2 | 16.2 | - - |
| Halligan | 6.4 | 6.4 | 5.3 | 3.9 |
| Horsetooth | 143.5 | 120.3 | 102.5 | 85.6 |
| Lake Loveland | 13.6 | 8.3 | 8.4 | 7.4 |
| Lone Tree | 9.2 | 8.3 | 3.0 | 7.9 |
| Mariano | 5.4 | 5.6 | 5.3 | 3.2 |
| Marshall | 10.3 | 7.4 | 1.7 | 4.4 |
| Marston | 18.9 | 15.3 | 15.7 | 15.2 |
| Milton | 24.4 | 18.4 | 1.8 | 12.5 |
| Standly | 18.5 | 20.6 | 9.4 | 12.6 |
| Terry Lake | 8.2 | 5.9 | 4.1 | 5.2 |
| Union | 12.7 | 12.7 | 6.6 | 8.2 |
| Windsor | 18.6 | 13.1 | 3.2 | 11.4 |

MEASURED FIRST OF MONTH

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|---------------|----------------|-------------------|-----------|-----------|-------------------------|
| Alpine Camp | 4/26 | 6.9 | 4.1 | 5.0 | 4.3 |
| Beaver Dam | 4/26 | 7.3 | 5.2 | 4.4 | 4.7 |
| Clear Creek | 4/28 | 9.5 | 6.4 | 5.7 | 5.9 |
| Feather | 4/27 | 10.1 | 9.4 | 10.1 | 8.1 |
| Guard Station | 5/1 | 6.9 | 4.6 | 3.2 | 4.7 |
| Hoop Creek | 4/26 | 4.9 | 3.5 | 2.8 | 2.9 |
| Hoosier Pass | 4/29 | 7.8 | 6.3 | 4.4 | 5.9 |
| Kenosha Pass | 4/29 | 4.4 | 3.3 | 3.5 | 3.7 |
| Laramie Road | 5/1 | 12.4 | 9.1 | 8.6 | 9.0 |
| Two Mile | 4/26 | 9.1 | 5.5 | 4.6 | 5.6 |

ALL PROFILES 4 FEET DEEP

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UNITED STATES

DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Snow Survey
 Colorado State University
 Fort Collins, Colorado

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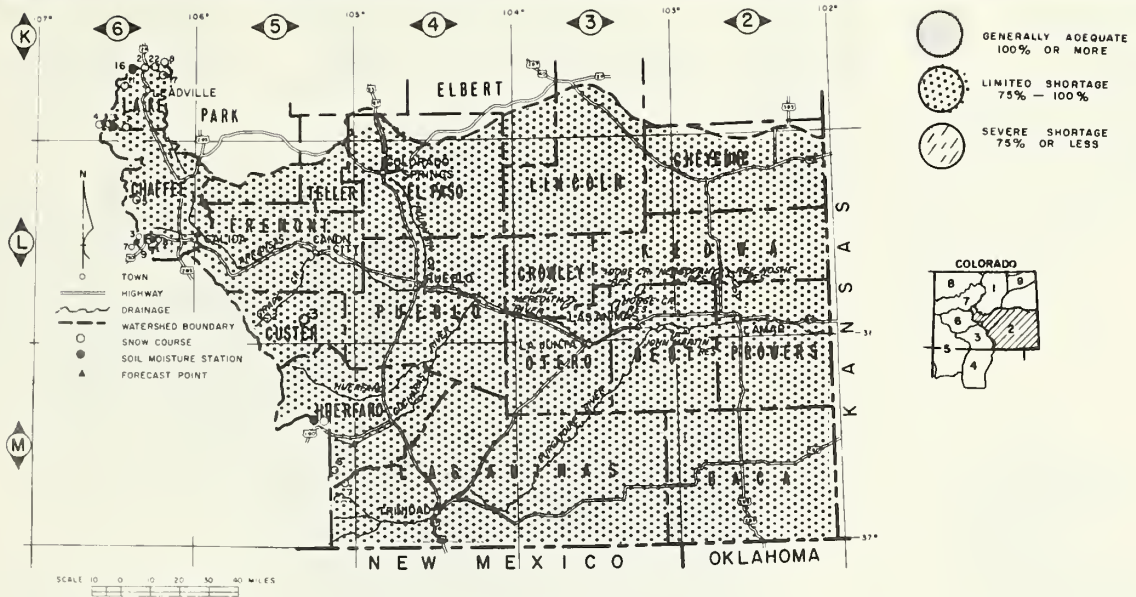
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WATERSHED II

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO
as of

May 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



Many of the snow courses in the Arkansas Drainage indicate no snow at the present time. The snow pack deteriorated again this month. Lack of snowfall combined with above seasonal temperatures has caused a record low snow pack. The over-all snow pack is only 41% of the 15 year average. There is practically no chance to increase the snow pack at this late date.

Forecasts are nearing the lowest on record. The Arkansas at Pueblo is only expected to flow 46% of the 15 year average. In 1954 the Arkansas at Salida flowed 158,000 acre-feet. This was the minimum flow in the last 15 years. This year it is expected to flow 160,000 acre feet.

Unless the summer produces at least average precipitation the river could have the lowest flow on record.

The one bright spot in the water supply outlook is the much above average reservoir storage. Current storage is 370% of the 1948-62 average. This will be a tremendous help this summer.

Current readings of mountain soil moisture are encouraging. They are all better than last year and normal, however, will not compensate for the low snow pack.

Valley soils are reported as fair to good. It is hoped that there will be enough valley soil moisture that crops won't have to be irrigated up.

Good water management will be a must this summer for farmers.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,
Colorado

Will D. McCorkle, Area Conservationist,
La Junta, Colorado

SNOW

| SNOW COURSE | NO. | CURRENT INFORMATION | | | PAST RECORD | |
|-------------------|------|---------------------|---------------------|------------------------|------------------------|-----------------|
| | | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | AVERAGE 1948-62 |
| Arkansas River | | | | | | |
| Bigelow Divide | 5L3 | 4/28 | 0 | 0 | 5.5 | - - |
| Blue Lakes | 5M6 | 4/25 | 0 | 0 | 2.0 | - - |
| Bourbon | 5M5 | 4/28 | 0 | 0 | 5.3 | 2.9* |
| Cooper Hill | 6K23 | 4/30 | 32 | 6.8 | 15.3 | - - |
| Cucharas Pass | 5M7 | 4/25 | 5 | 1.6 | 4.0 | - - |
| East Fork | 6K17 | 4/26 | 7 | 2.0 | 13.6 | 13.4 |
| Four Mile Park | 6K7 | 4/28 | 0 | 0 | 6.6 | 1.0 |
| Fremont Pass | 6K8 | 4/26 | 39 | 10.3 | 23.8 | 19.5 |
| Garfield | 6L8 | 4/25 | 11 | 3.1 | 22.9 | - - |
| LaVeta Pass (B) | 5M1 | 4/26 | 0 | 0 | 5.1 | 1.7 |
| Monarch Pass | 6L4 | 4/25 | 25 | 9.3 | 27.0 | 18.4 |
| St. Elmo (Air) | 6L5 | 4/28 | 16 | 5.6 | 22.0 | 11.8 |
| Tennessee Pass | 6K2 | 4/28 | 16 | 5.0 | 13.5 | 8.5 |
| Tomichi | 6L7 | 4/26 | 16 | 5.5 | 17.7 | - - |
| Twin Lakes Tunnel | 6K3 | 5/3 | 11 | 4.0 | 15.5 | 9.1 |
| Westcliffe | 5L2 | 4/28 | 0 | 0 | 3.4 | 1.1 |

NOTE: * - 1948-62 (adjusted averages)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by
 Jack N. Washichek and
 Don W. McAndrew
 Soil Conservation Service
 Colorado State University
 Fort Collins, Colorado

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | THIS YEAR | LAST YEAR | 15 YEAR AVERAGE 1948-62 |
|--------------|-----------------|-----------|-----------|-------------------------|
| Adobe Creek | 61.6 | 54.4 | 0 | 13.0 |
| Clear Creek | 11.4 | 11.2 | 7.6 | 4.7 |
| Cucharas | 40.0 | 0 | 0 | 5.3 |
| Great Plains | 150.0 | 123.3 | 0 | 44.4 |
| Horse Creek | 26.9 | 21.0 | 0 | 5.6 |
| John Martin | 366.6 | 352.5 | 0 | 64.6 |
| Meredith | 41.9 | 24.5 | 0 | 10.4 |
| Model | 15.0 | | 0.1 | 2.2 |
| Sugar Loaf | 17.4 | 11.3 | 5.2 | 6.8 |
| Twin Lakes | 57.9 | 41.0 | 2.4 | 17.2 |

MEASURED FIRST OF MONTH

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|-------------------|----------------|-------------------|-----------|-----------|-------------------------|
| Garfield | 4/25 | 6.7 | 6.3 | 5.8 | 4.3 |
| King | 4/25 | 3.3 | 3.0 | 2.8 | 2.1 |
| LaVeta Pass | 4/27 | 11.9 | 11.9 | 11.9 | 11.8 |
| Leadville | 4/26 | 7.8 | 5.7 | 5.5 | 4.8 |
| Twin Lakes Tunnel | 4/26 | 4.5 | 4.2 | 4.1 | 3.1 |

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

| STREAM AND STATION | APRIL THROUGH SEPTEMBER | | THIS YEAR | AVERAGE 1948-62 |
|------------------------|-------------------------|----------|-----------|-----------------|
| | APRIL - SEPT. | FORECAST | % AVERAGE | |
| Arkansas at Pueblo (4) | 150 | 46 | 323 | |
| Arkansas at Salida (4) | 160 | 46 | 345 | |
| Cucharas nr LaVeta | 13 | 93 | 14 | |
| Purgatoire at Trinidad | 28 | 62 | 45 | |

- (4) Observed flow plus change in storage in Clear Creek, Twin Lakes, and Sugar Loaf Reservoirs minus diversions through Busk-Ivanhoe and Twin Lake Tunnels and Ewing, Fremont Pass, Wurtz and Columbine Ditches.

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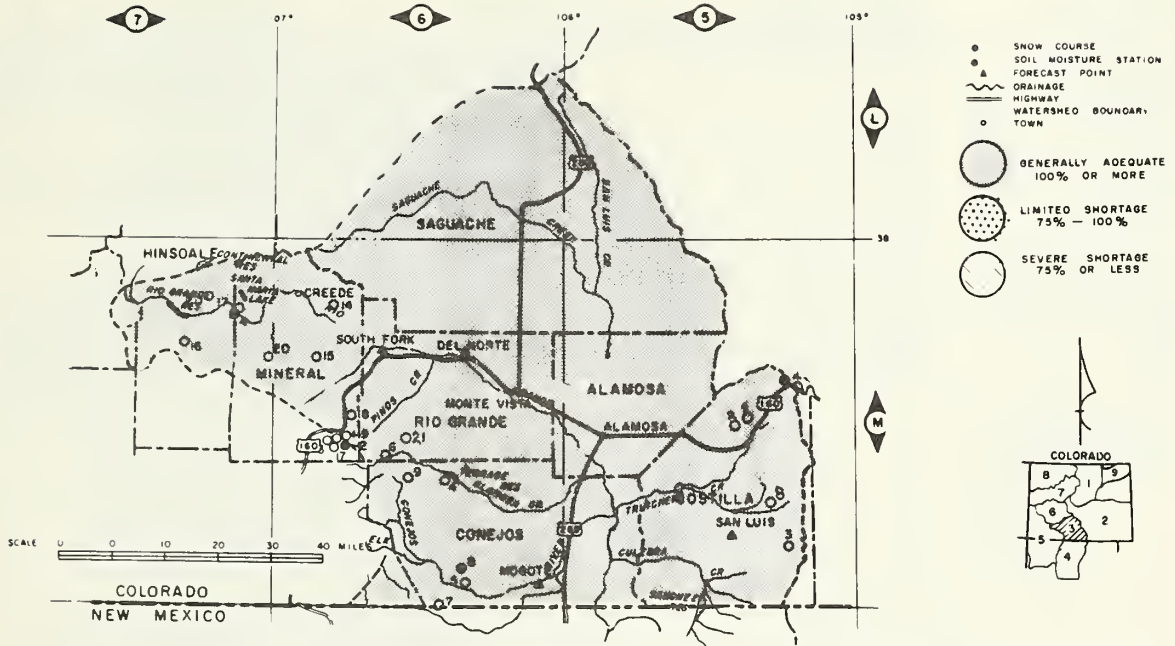
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WATERSHED III

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of
May 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The Rio Grande Basin in Colorado is one of only two areas that can look forward to near normal water supplies this summer. Although some forecasts were dropped slightly, water supplies should be adequate this summer.

Over-all snow pack on the Rio Grande is 91% of average, as is the snow on the Conejos. The Alamosa Basin has slightly less snow, but still is 84% of normal.

Low snow has started to melt and summer runoff won't be far behind.

Carry-over storage is well above average and will be an excellent supplemental supply.

Mountain soils are generally wetter than normal and should help the runoff.

Valley soils are in good shape in the San Luis Valley.

Forecasts on the Alamosa and Rio Grande are about 95% while other tributary streams are slightly less.

Culebra Creek, which originates above San Luis in the Sandre De Cristos is being forecast at 109%.

Forecasts are based on normal precipitation for the remainder of the year.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,
Colorado

Robert K. Griffin, Area Conservationist,
Durango, Colorado

SNOW

| SNOW | | CURRENT INFORMATION | | | PAST RECORD | |
|-------------------------------|------|---------------------|---------------------|------------------------|------------------------|-----------------|
| SNOW COURSE | NO. | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | |
| | | | | | LAST YEAR | AVERAGE 1948-62 |
| <u>Rio Grande in Colorado</u> | | | | | | |
| Cochetopa Pass | 6L6 | 4/26 | 0 | 0 | 5.9 | 2.7* |
| Hiway | 6M19 | 4/25 | 62 | 25.7 | 44.3 | 27.8* |
| Lake Humphreys | 6M15 | 4/27 | 2 | 0.4 | 3.4 | 0.2* |
| Pass Creek | 6M18 | 4/25 | 5 | 2.2 | 16.1 | 3.3* |
| Pool Table | 6M14 | 4/26 | 4 | 1.8 | 9.0 | 1.9* |
| Porcupine | 6M20 | 4/26 | 25 | 7.4 | 15.0 | 6.8* |
| Red Mountain Pass (B) | 7M15 | 4/25 | 68 | 25.5 | 40.2 | 31.4* |
| Santa Maria | 7M17 | 4/29 | 0 | 0 | 1.7 | 0.5 |
| Upper Rio Grande | 7M16 | 4/26 | 5 | 1.8 | 6.1 | 2.3 |
| Wolf Creek Pass | 6M1 | 4/25 | 44 | 23.2 | 43.4 | 24.7 |
| Wolf Creek Summit (B) | 6M17 | 4/25 | 79 | 32.2 | 50.6 | 30.2 |
| <u>Alamosa River</u> | | | | | | |
| Silver Lakes | 6M4 | 4/27 | 0 | 0 | 5.1 | 0.5 |
| Summitville | 6M6 | 4/25 | 62 | 17.6 | 36.0 | 20.5 |
| <u>Conejos River</u> | | | | | | |
| Cumbres Pass | 6M7 | 4/27 | 21 | 11.8 | 30.5 | 12.5 |
| Platoro | 6M9 | 4/28 | 27 | 9.2 | 24.8 | 10.9* |
| River Springs | 6M5 | ---- | -- | - - | | 0.7 |
| <u>Sangre De Cristo Range</u> | | | | | | |
| Blue Lakes (8) | 6M6 | 4/25 | 0 | 0 | 2.0 | - - |
| Cucharas Pass (B) | 5M7 | 4/25 | 5 | 1.6 | 4.0 | - - |
| Culebra | 6M3 | 4/27 | 16 | 5.3 | 8.9 | 5.2 |
| LaVeta Pass | 5M1 | 4/26 | 0 | 0 | 5.1 | 1.7 |

NOTE: * - 1948-62 (adjusted averages)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by
 Jack N. Washichek and
 Don W. McAndrew
 Soil Conservation Service
 Colorado State University
 Fort Collins, Colorado

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | THIS YEAR | LAST YEAR | 15 YEAR AVERAGE 1948-62 |
|-------------|-----------------|-----------|-----------|-------------------------|
| Continental | 26.7 | 10.1 | 3.2 | 7.7 |
| Platoro | 60.0 | 17.3 | 5.1 | -- |
| Rio Grande | 45.8 | 39.8 | 15.2 | 14.8 |
| Sanchez | 103.2 | 15.1 | 6.5 | 12.3 |
| Santa Maria | 45.0 | 18.4 | 4.6 | 7.8 |
| Terrace | 17.7 | 10.8 | 7.8 | 4.8 |

MEASURED FIRST OF MONTH

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|--------------|----------------|-------------------|-----------|-----------|-------------------------|
| Alberta Park | 4/25 | 8.2 | 7.1 | 5.6 | 5.6 |
| Bristol View | 4/26 | 6.1 | 6.1 | 4.2 | 4.4 |
| LaVeta Pass | 4/27 | 11.9 | 11.9 | 11.9 | 11.8 |
| Mogote | 4/27 | 10.7 | 8.6 | 10.5 | 9.0 |

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

| APRIL THROUGH SEPTEMBER | | THIS YEAR | |
|----------------------------------|------------------------|-----------|---------|
| STREAM AND STATION | FORECAST APRIL - SEPT. | AVERAGE | 1948-62 |
| Alamosa abv Terrace | 66 | 97 | 68 |
| Conejos nr Mogote | 175 | 89 | 196 |
| Culebra at San Luis (6) | 23 | 109 | 21 |
| Rio Grande at 30 Mile Bridge (5) | 128 | 97 | 132 |
| Rio Grande nr Del Norte (5) | 460 | 93 | 492 |
| South Fork at South Fork | 115 | 94 | 122 |

- (5) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoir.
 (6) Observed flow plus changes in storage in Sanchez Reservoir.

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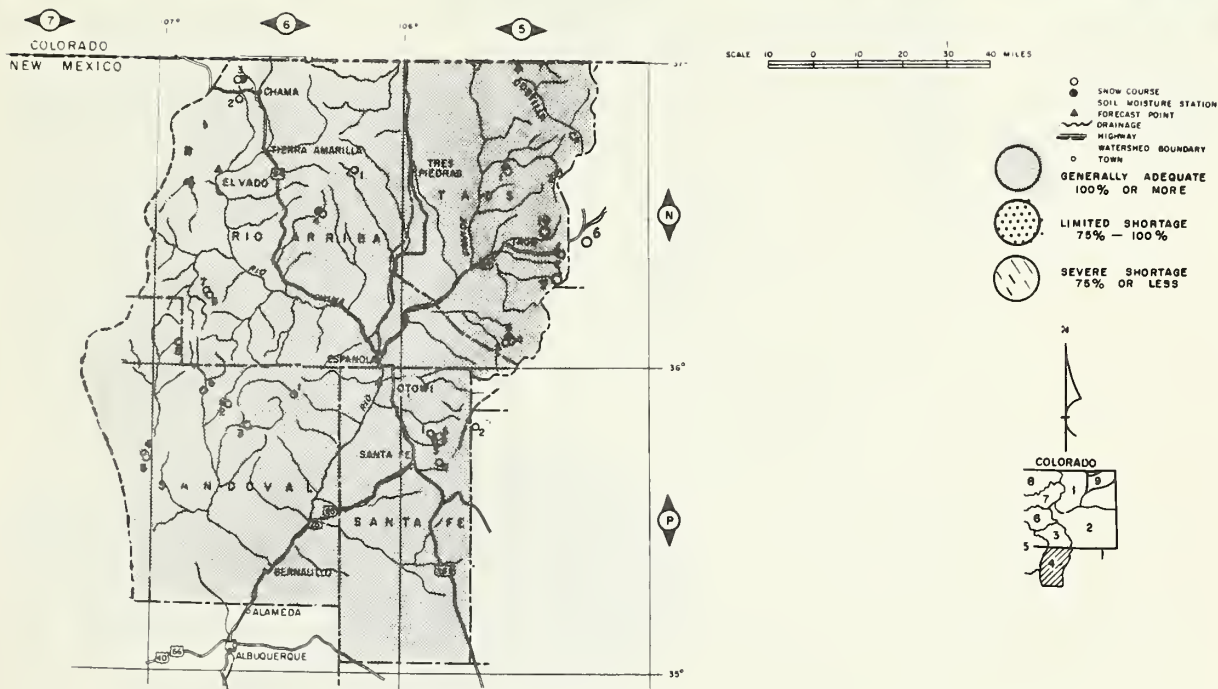
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RIO GRANDE WATERSHED IN NEW MEXICO

as of

May 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



Forecasts remain nearly the same as last month. Water supplies should be near normal with slightly better than average carry-over storage.

The snow pack is largely gone in New Mexico, but the headwaters of the Rio Grande in Colorado still has a considerable amount of snow remaining.

This is one of the few areas of the West that can look forward to near normal water supplies.

Snow pack over the entire Rio Grande Drainage is 87% of normal.

Carry-over storage is 106% of the 1948-62 average.

Mountain soils are slightly wetter than usual and will increase the flows slightly more than the snow would indicate.

Valley soils in the lower reaches of the Rio Grande are reported as dry, while the Upper Rio Grande areas are reporting fair soil moisture.

The Pecos and Canadian Watersheds should have adequate water supplies this summer.

Forecasts range from a low of 80% on the Costilla to 102% on the Rio Grande.

Some timely rains could improve the outlook even more.

“THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY”

Issued By: Soil Conservation Service

Einar L. Roget, State Conservationist,
Albuquerque, New Mexico

Walter B. Rumsey, Area Conservationist,
Santa Fe, New Mexico

SNOW

| SNOW COURSE | NO. | CURRENT INFORMATION | | | PAST RECORD | |
|------------------------------|------|---------------------|---------------------|------------------------|------------------------|-----------------|
| | | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | |
| | | | | | LAST YEAR | AVERAGE 1948-52 |
| <u>Rio Grande (Colorado)</u> | | | | | | |
| Culebra | 6M3 | 4/27 | 16 | 5.3 | 8.9 | 5.2 |
| Cumbres Pass | 6M7 | 4/27 | 21 | 11.8 | 30.5 | 12.5 |
| LaVeta Pass | 5M1 | 4/26 | 0 | 0 | 5.1 | 1.7 |
| Platoro | 6M9 | 4/28 | 27 | 9.2 | 24.8 | 10.9* |
| River Springs | 6M5 | NS | | | ---- | 0.7 |
| Santa Maria | 7M17 | 4/29 | 0 | 0 | 1.7 | 0.5 |
| Silver Lakes | 6M4 | 4/27 | 0 | 0 | 5.1 | 0.5 |
| Summitville | 6M6 | 4/25 | 62 | 17.6 | 36.0 | 20.5 |
| Upper Rio Grande | 7M16 | 4/26 | 5 | 1.8 | 6.1 | 2.3 |
| Wolf Creek Pass | 6M1 | 4/25 | 44 | 23.2 | 43.4 | 24.7 |
| | | | | | | |
| Big Tesuque (New Mexico) | 5P3 | ---- | -- | -- | 0.4 | -- |
| Chamita | 6N3 | 4/27 | 0 | 0 | 0.7 | -- |
| Red River | 5N1 | ---- | -- | -- | 2.5 | -- |
| Taos Canyon | 5N2 | ---- | -- | -- | 6.5 | -- |

NOTE: * - 1948-52 (adjusted averages)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

Rio Grande at San Marcial is
 Forecast at 59 % of the Elephant
 Butte Irrigation District's normal.

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This Report Prepared by
 Jack N. Washichek and
 Don W. McAndrew
 Soil Conservation Service
 Colorado State University
 Fort Collins, Colorado

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | THIS YEAR | LAST YEAR | 15 YEA AVERAGE 1948-62 |
|-----------------|-----------------|-----------|-----------|------------------------|
| Alamogordo | 122.1 | 27.8 | 2.0 | 63.8 |
| Caballo | 344.0 | 103.4 | 12.9 | 102.1 |
| Conchas | 280.3 | 239.3 | | 229.5 |
| Elephant Butte | 2206.8 | 479.4 | 145.6 | 354.0 |
| El Vado | 194.5 | 13.0 | 29.0 | 55.1 |
| McMillan-Avalon | 37.0 | 11.5 | 6.0 | 10.6 |
| Red Bluff (Tex) | 307.0 | 52.7 | 20.4 | 59.1 |

MEASURED FIRST OF MONTH

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|-------------------|----------------|-------------------|-----------|-----------|-------------------------|
| Colorado | | | | | |
| Alberta Park | 4/25 | 8.2 | 7.1 | 5.6 | 5.6 |
| Bristol View | 4/26 | 6.1 | 6.1 | 4.2 | 4.4 |
| Mogote | 4/27 | 10.7 | 8.6 | 10.5 | 9.0 |
| New Mexico | | | | | |
| Aqua Piedra | 3/30 | 7.2 | 5.3 | 2.7 | 4.7 |
| Bateman | 3/25 | 6.7 | 4.8 | NS | 2.7 |
| Big Tesuque | 3/30 | 3.7 | 1.9 | 1.7 | 2.4 |
| Chamita | 3/30 | 8.0 | 8.0 | 5.5 | 5.4 |
| Fenton Hill | 3/27 | 6.5 | 6.5 | 3.7 | -- |
| Red Summit | 3/29 | 4.8 | 1.5 | 1.6 | 2.1 |
| Rio En Medio | 3/30 | 3.5 | 1.6 | 1.9 | 1.5 |
| Taos Canyon | 3/28 | 3.3 | 2.5 | 2.2 | 2.9 |

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.) APRIL THROUGH SEPTEMBER

| STREAM AND STATION | FORECAST | | THIS YEAR APRIL - JULY % AVERAGE | AVERAGE 1948-52 |
|--------------------------------|--------------|-------|--|--------------------|
| | APRIL - JULY | SEPT. | | |
| Costilla at Costilla (8) | 20 | 80 | | 25 |
| Pecos at Pecos | 60 | 113 | | 53 |
| Rio Chama nr La Puente | 180 | 84 | | 214 |
| Rio Grande at Otowi (7)* | 620 | 102 | | 609 |
| Rio Grande at San Marcial (7)* | | 411 | 97 | 424 |
| Rio Hondo nr Valdez | 18 | 100 | | 18 |
| Red River at Questa** | 22 | 88 | | 25 |

(7) Observed flow plus changes in storage in El Vado and Abiquiu Reservoirs.

(8) Observed flow plus changes in storage in Costilla Reservoir.

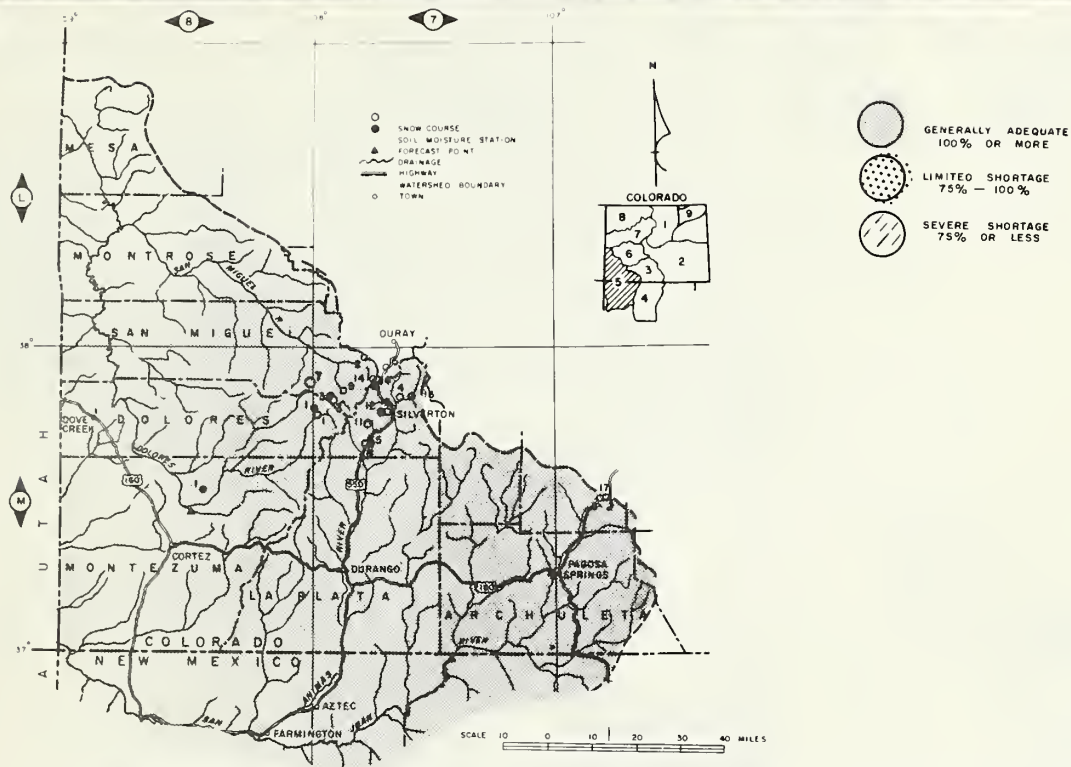
* Rio Grande at Otowi and Rio Grande at San Marcial, Forecast and Average are March - July inclusive.

** Red River at Questa Forecast and Average April - July inclusive.

WATER SUPPLY OUTLOOK WATERSHED V
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL - DOLORES - ANIMAS - SAN JUAN
WATERSHEDS IN COLORADO AND NEW MEXICO

as of
May 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



Streamflow forecasts were again reduced this month, however, prospects are still good for a near normal water supply this summer.

Even the high elevation snow fields lost snow during the month. The high elevation winds took their toll of the snow fields. Streams have not started to flow much, so most of the loss of snow pack is due to evaporation.

Some of the snow pack has started to melt. This is not unusual in the lower elevations, but it is in the higher areas, such as Spud Mountain. The last time the Ironton Park Snow Course registered zero was 1954.

The current snow pack remains 92% of average on the San Juan, 78% on the Animas and only 66% of normal on the Dolores.

Mountain and valley soils are in good shape. Most of the mountain soils are saturated.

Reservoir carry-over storage is good, and those people under a reservoir system will have an excellent supply when needed.

Forecast of the Animas at Durango is 92% of the 15 year average. The San Juan should flow slightly better. Current forecast is for 580,000 acre-feet or 97% of normal. The Dolores has the poorest snow cover in the area and is being forecast at only 80% of average.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,
Colorado
Robert K. Griffin, Area Conservationist,
Durango, Colorado

Einar L. Roget, State Conservationist,
Albuquerque, New Mexico
Walter B. Rumsey, Area Conservationist,
Santa Fe, New Mexico

Dearl Beach, Area Conservationist,
Grand Junction, Colorado

SNOW

| SNOW | | CURRENT INFORMATION | | | PAST RECORD | |
|-----------------------|------|---------------------|---------------------|------------------------|------------------------|-----------------|
| SNOW COURSE | NO. | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | |
| | | | | | LAST YEAR | AVERAGE 1948-52 |
| <u>San Juan River</u> | | | | | | |
| Chama Divide (B) | 6N2 | 4/27 | 0 | 0 | 0 | - - |
| Chamita (B) | 6N3 | 4/27 | 0 | 0 | 0.7 | - - |
| Upper San Juan | 6M3 | 4/25 | 46 | 23.1 | 49.2 | 30.2 |
| Wolf Creek Pass (B) | 6M1 | 4/25 | 44 | 23.2 | 43.4 | 24.7 |
| Wolf Creek Summit | 6M17 | 4/25 | 79 | 32.2 | 50.6 | 30.2 |
| <u>Animas River</u> | | | | | | |
| Cascade | 7M5 | 4/25 | 6 | 2.8 | 10.7 | 3.0 |
| Howardville | 7M13 | 4/25 | 26 | 9.0 | 16.0 | 7.4* |
| Ironton Park (B) | 7M6 | 4/26 | 0 | 0 | 8.4 | 7.1 |
| Mineral Creek | 7M14 | 4/25 | 29 | 11.3 | 18.2 | 12.1* |
| Molas Lake | 7M12 | 4/25 | 17 | 5.4 | 17.9 | 7.8* |
| Red Mountain Pass | 6M19 | 4/25 | 68 | 25.5 | 40.2 | 31.4* |
| Silverton Sub-Station | 7M4 | 4/25 | 0 | 0 | 0.5 | 0.1 |
| Spud Mountain | 7M11 | 4/25 | 45 | 18.2 | 36.6 | 23.8* |
| <u>Dolores River</u> | | | | | | |
| Lizzard Head | 7M3 | 4/28 | 26 | 13.2 | 20.1 | 13.7 |
| Rico | 7M1 | 4/28 | 0 | 0 | 0.0 | 1.0 |
| Telluride | 7M2 | 4/28 | 0 | 0 | 0.0 | 0.7 |
| Trout Lake | 7M9 | 4/28 | 9 | 3.6 | 14.2 | 9.9* |

NOTE: * - 1948-52 (adjusted averages)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | THIS YEAR | LAST YEAR | 15 YEAR AVERAGE 1948-62 |
|-----------|-----------------|-----------|-----------|-------------------------|
| Groundhog | 21.7 | 21.7 | 7.5 | 8.6 |
| Navajo | 1036.0 | 255.5 | 385.0 | - - |
| Vallecito | 126.3 | 88.0 | 59.0 | 50.9 |

MEASURED FIRST OF MONTH

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|---------------|----------------|-------------------|-----------|-----------|-------------------------|
| Cascade | 4/25 | 9.1 | 9.1 | 9.1 | 6.8 |
| Dolores | 4/28 | 19.6 | 15.1 | 19.6 | 11.4 |
| Lizzard Head | 4/28 | 11.8 | 8.6 | 10.7 | 8.5 |
| Mineral Creek | 4/25 | 5.7 | 5.6 | 5.4 | 4.1 |
| Molas Lake | 4/25 | 9.4 | 9.4 | 9.0 | 5.8 |
| Rico | 4/28 | 13.8 | 13.8 | 13.5 | 9.0 |

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

| STREAM AND STATION | APRIL THROUGH SEPTEMBER | | THIS YEAR AVERAGE |
|---------------------------|-------------------------|----------|-------------------|
| | APRIL - SEPT. | FORECAST | |
| Animas at Durango | 420 | 92 | 456 |
| Dolores at Dolores | 205 | 80 | 260 |
| La Plata at Hesperus | 24 | 89 | 27 |
| Los Pinos at Bayfield (9) | 235 | 107 | 220 |
| Piedra Creek nr Piedra | 158 | 87 | 182 |
| San Juan at Rosa (9) | 580 | 97 | 597 |

(9) OBSERVED FLOW PLUS CHANGES IN STORAGE IN VALLECITO RESERVOIR

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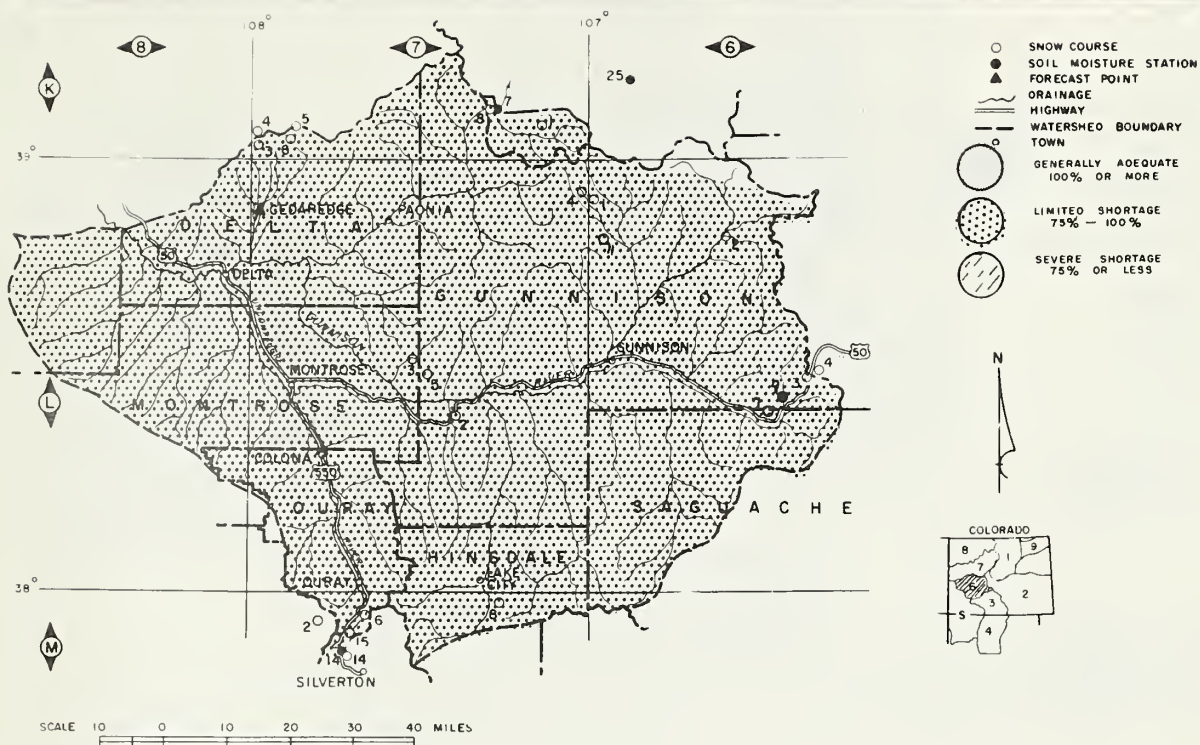
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GUNNISON RIVER WATERSHED IN COLORADO

as of

May 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



Water supplies on the Gunnison River should be about one-half of normal this summer. With this prospect, water management must be practiced by all water users.

April storms were scarce over the watershed. Warm temperatures and warm winds evaporated the little snow that did fall. The overall snow pack is about 60% of normal, but some of the key snow courses are bare at this date. The Uncompahgre is in slightly better shape and should flow about 60% of normal, while the Surface Creek will probably flow about 70% of the 1948-62 average.

Soil moisture stations located in high plateaus indicate near normal conditions.

Taylor Park Reservoir contains 88,700 acre-feet compared to a normal of 60,300 acre-feet.

Forecasts are based on normal precipitation for the remainder of the year. When forecasts are as low as this year, summer storms can change the picture materially. Some timely shower would be of great benefit this summer.

Valley soil moisture is reported as fair.

“THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY”

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,
Colorado

Dearl Beach, Area Conservationist,
Grand Junction, Colorado

SNOW

| SNOW COURSE | | NO. | CURRENT INFORMATION | | | PAST RECORD | |
|-------------------|-----|------|---------------------|---------------------|------------------------|------------------------|-----------------|
| | | | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | |
| | | | | | | LAST YEAR | AVERAGE 1948-62 |
| Gunnison River | | | | | | | |
| Alexander Lakes | | 7K3 | 4/29 | 39 | 15.7 | 27.8 | 23.0 |
| Black Mesa | 7L | 7L5 | ---- | -- | -- | 22.6 | -- |
| Blue Mesa | | 7L2 | 4/26 | 0 | 0 | 3.2 | 2.3* |
| Butte | | 6L11 | 4/28 | 0 | 0 | 22.3 | -- |
| Cochetopa Pass | | 6L6 | 4/26 | 0 | 0 | 5.9 | 2.7* |
| Crested Butte | | 6L1 | 4/28 | 0 | 0 | 24.6 | 7.5 |
| Keystone | | 7L3 | 4/28 | 22 | 8.7 | 30.8 | -- |
| Lake City | | 7M8 | 4/25 | 0 | 0 | 8.7 | 3.5 |
| Long Gulch | | 7L4 | | | | | -- |
| Mesa Lakes | (B) | 7K4 | 4/28 | 24 | 9.6 | 21.7 | 15.9 |
| Monarch Pass | (B) | 6L4 | 4/25 | 25 | 9.3 | 27.0 | 18.4 |
| McClure Pass | | 7K8 | 4/25 | 5 | 2.2 | 19.7 | 10.1* |
| Mineral Creek | (B) | 7M14 | 4/25 | 29 | 11.3 | 18.2 | 12.1* |
| North Lost Trail | (B) | 7K1 | 4/25 | 3 | 1.0 | 18.9 | |
| Park Cone | | 6L2 | 4/26 | 15 | 5.2 | 15.5 | 8.7 |
| Park Reservoir | | 7K6 | 4/26 | 48 | 21.4 | 30.7 | 25.5 |
| Porphyry Creek | | 6L3 | 4/25 | 36 | 10.9 | 24.3 | 17.7 |
| Tomichi | | 6L7 | 4/26 | 16 | 5.5 | 17.7 | -- |
| Trickle Divide | (B) | 7K5 | 4/26 | 56 | 23.8 | 33.5 | 28.8 |
| Uncompahgre River | | | | | | | |
| Ironton Park | | 7M6 | 4/26 | 0 | 0 | 8.4 | 7.1 |
| Lizzard Head | | 7M3 | 4/28 | 26 | 13.2 | 20.1 | 13.7 |
| Lone Cone | | 7M7 | 4/28 | 11 | 4.7 | 15.6 | -- |
| Red Mountain Pass | (B) | 7M15 | 4/25 | 68 | 25.5 | 40.2 | 31.4 |
| Telluride | | 7M2 | 4/28 | 0 | 0 | 0.0 | 0.7 |
| Trout Lake | | 7M9 | 4/28 | 9 | 3.6 | 14.2 | 9.9* |

NOTE: * - 1948-62 (adjusted averages)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | THIS YEAR | LAST YEAR | 15 YEAR AVERAGE 1948-62 |
|-----------|-----------------|-----------|-----------|-------------------------|
| Taylor | 106.2 | 88.7 | 41.7 | 60.3 |

MEASURED FIRST OF MONTH

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|---------------|----------------|-------------------|-----------|-----------|-------------------------|
| Grand Mesa | 4/26 | 12.5 | 12.5 | 12.2 | - |
| King | 4/25 | 3.3 | 3.0 | 2.8 | 2.1 |
| Mineral Creek | 4/25 | 5.7 | 5.6 | 5.4 | 4.1 |
| Placita | 4/27 | 9.3 | 7.5 | 7.5 | 8.1 |

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

| STREAM AND STATION | APRIL THROUGH SEPTEMBER | | |
|----------------------------|-------------------------|-------------|-----------------|
| | FORECAST APRIL - SEPT. | THIS YEAR % | AVERAGE 1948-62 |
| | | | |
| Gunnison nr Grand Jct. | 650 | 50 | 1305 |
| Surface Creek nr Cedaridge | 12 | 71 | 17 |
| Uncompahgre at Colona | 82 | 60 | 139 |

This Report Prepared by
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 Don W. McAndrew
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 Colorado State University
 Fort Collins, Colorado

RETURN IF NOT DELIVERED

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DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

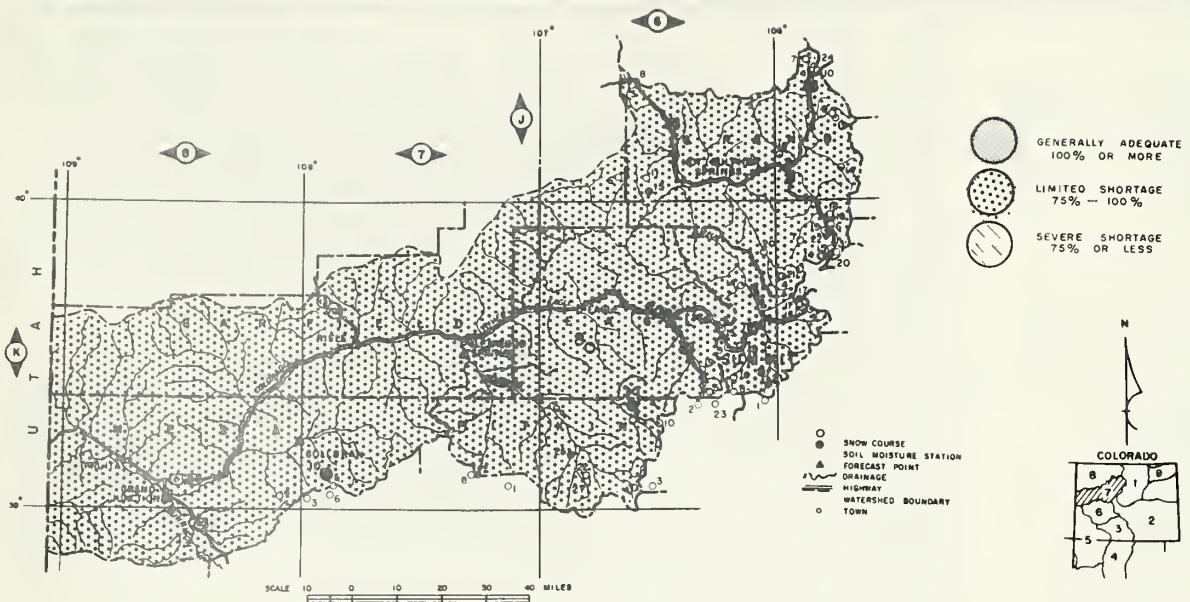
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 U.S. DEPARTMENT OF AGRICULTURE

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
May 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



Water supply prospects on the Colorado River are poor. This may well be the poorest water year since 1954. Snow pack deteriorated for the second straight month and is now only 44% of normal on the main stem of the Colorado and 39% on the Roaring Fork. The Grand Mesa area has had relatively good snow all winter, but it now has only 76% of the 1948-62 average snow pack.

Lack of April snows as well as above seasonal temperatures are responsible for the much below normal snow conditions.

Soil moisture conditions are generally better than last year and near average. This condition will be helpful, but won't near make up the deficient snow cover. It is felt the soil moisture would change forecast by less than 10%.

Valley soils are reported as fair to good.

Reservoir storage on the Colorado River is above last year and above normal.

Forecasts dipped again this month. The Colorado is expected to flow near 50% of normal while the Roaring Fork is forecasted at only 65% of the 15 year average. Small tributary streams such as the Williams Fork and Willow Creek can expect flows less than one-half of normal.

Farmers and ranchers dependent upon river flows will be extremely short of water.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,
Colorado

Dearl Beach, Area Conservationist,
Grand Junction, Colorado

J. L. Hall, Area Conservationist,
Glenwood Springs, Colorado

SNOW

| SNOW | | CURRENT INFORMATION | | | PAST RECORD | |
|---------------------------|------|---------------------|---------------------|------------------------|------------------------|-----------------|
| SNOW COURSE | NO. | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | |
| | | | | | LAST YEAR | AVERAGE 1948-52 |
| Colorado River | | | | | | |
| Arrow | 5K6 | 4/27 | 22 | 5.3 | 15.1 | 9.1 |
| Berthoud Pass | 5K3 | 4/27 | 29 | 8.4 | 19.2 | 15.7 |
| Berthoud Summit | 5K14 | 5/2 | 46 | 13.5 | 26.2 | 21.6 |
| Blue River | 6K21 | 4/29 | 0 | 0 | 12.7 | 8.0* |
| Cooper Hill | 6K23 | 4/30 | 32 | 6.8 | 15.3 | - |
| Fiddlers Gulch | 6K5 | 4/28 | 26 | 7.4 | 18.6 | 17.0 |
| Fremont Pass | 6K8 | 4/26 | 39 | 10.3 | 23.8 | 19.5 |
| Frisco | 6N3 | 4/29 | 4 | 1.2 | 8.0 | 5.6* |
| Glen Mar Ranch | 6K20 | 4/25 | 1 | 0.5 | 7.1 | 4.8 |
| Gore Pass | 6J11 | 4/26 | 3 | 1.3 | 13.2 | 7.9* |
| Granby | 5J16 | 4/25 | 6 | 2.3 | 8.8 | 3.3* |
| Grand Lake | 5J19 | 4/27 | 3 | 0.5 | 8.1 | 3.7* |
| Grizzly Peak | 5K9 | 4/28 | 35 | 10.7 | 28.0 | 21.1 |
| Hoosier Pass (B) | 6K1 | 4/29 | 23 | 6.0 | 19.8 | 12.9 |
| Jones Pass | 5K21 | 4/27 | 29 | 9.1 | 19.5 | 16.9* |
| Lake Irene | 5J10 | 4/27 | 43 | 12.0 | 29.2 | 24.7 |
| Lapland | 5K9 | 4/29 | 1 | 0.2 | 11.2 | 9.3 |
| Lulu | 5J7 | 4/24 | 41 | 10.5 | 22.1 | 19.8 |
| Lynx Pass | 6J6 | 4/26 | 4 | 1.6 | 10.8 | 7.8 |
| McKinzie Gulch | 6K28 | 4/12 | 0 | 0 | 3.3 | - |
| Middle Fork Campground | 5K4 | 4/25 | 12 | 4.2 | 10.9 | 6.4 |
| Milner | 5J24 | 4/26 | 24 | 7.4 | 17.8 | 12.1* |
| Monarch Lake | 5J14 | 4/28 | 4 | 1.3 | 10.7 | 6.4 |
| North Inlet to Grand Lake | 5J9 | 4/26 | 9 | 2.5 | 10.5 | 6.7 |
| Pando | 6K19 | 4/26 | 11 | 3.4 | 12.5 | 8.3 |
| Phantom Valley | 5J4 | 4/27 | 2 | 0.5 | 12.1 | 7.0 |
| Ranch Creek | 5K18 | 4/27 | 19 | 4.2 | 12.2 | 9.6* |
| Shrine Pass | 6K9 | 4/29 | 40 | 9.6 | 24.7 | 20.2 |
| Snake River | 5K16 | 4/28 | 0 | 0 | 7.0 | 5.1* |
| Summit Ranch | 6K14 | 4/26 | 4 | 1.6 | 11.5 | 6.1* |
| Tennessee Pass | 6K2 | 4/28 | 16 | 5.0 | 13.5 | 8.5 |
| Vail Pass | 6K15 | 4/29 | 20 | 6.6 | 23.9 | 16.3* |
| Vasquez Creek | 5K19 | 4/27 | 25 | 8.0 | 15.8 | 14.0 |
| Willow Creek Pass | 6J5 | 4/28 | 19 | 6.5 | 12.5 | 12.0 |
| Roaring Fork River | | | | | | |
| Aspen | 7J22 | 4/27 | 38 | 12.0 | 23.5 | - |
| Independence Pass Tunnel | 6K4 | 4/29 | 32 | 10.1 | 22.9 | 17.6 |
| Ivanhoe | 6K10 | NS | | | 19.8 | 19.2 |
| Lift | 7K27 | 4/27 | 38 | 11.4 | 28.0 | 17.8* |
| McClure Pass | 7K8 | 4/25 | 5 | 2.2 | 19.7 | 10.1* |
| Nast | 6K6 | 4/23 | 0 | 0 | 6.4 | 1.7 |
| North Lost Trail | 7K1 | 4/25 | 3 | 1.0 | 18.9 | 8.0 |
| Plateau Creek | | | | | | |
| Alexander Lake (B) | 7K3 | 4/29 | 39 | 15.7 | 27.8 | 23.0 |
| Mesa Lakes | 7K4 | 4/28 | 24 | 9.6 | 21.7 | 15.9 |
| Park Reservoir (B) | 7K6 | 4/26 | 48 | 21.4 | 30.7 | 25.5 |
| Trickle Divide | 7K5 | 4/26 | 45 | 23.8 | 33.5 | 28.8 |

NOTE: * - 1948-62 (adjusted averages)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | THIS YEAR | LAST YEAR | 15 YEAR AVERAGE 1948-62 |
|----------------|-----------------|-----------|-----------|-------------------------|
| Granby | 465.5 | 219.6 | 46.2 | 185.0 |
| Green Mountain | 146.9 | 63.4 | 46.8 | 46.9 |
| Vega | 32.9 | 26.0 | 8.0 | - |
| Williams Fork | 96.8 | 17.9 | 18.9 | - |

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|----------------|----------------|-------------------|-----------|-----------|-------------------------|
| Berthoud Pass | 4/27 | 3.9 | 3.5 | 2.6 | 2.8 |
| Blue River | 4/29 | 4.2 | 4.2 | 2.8 | 2.7 |
| Gore | 4/26 | 4.9 | 4.5 | 3.3 | 4.4 |
| Grand Mesa | 4/26 | 12.5 | 12.5 | 12.2 | - |
| Muddy Pass | 4/26 | 11.1 | 11.1 | 6.7 | 8.5 |
| Placita | 4/27 | 9.3 | 7.5 | 7.5 | 8.1 |
| Ranch Creek | 3/30 | 8.7 | 5.9 | 5.8 | 6.5 |
| Vail | 4/29 | 12.3 | 9.1 | 9.0 | 11.0 |
| Vasquez Siphon | 4/26 | 11.0 | 8.6 | 7.9 | 9.2 |

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

| STREAM AND STATION | FORECAST THIS APRIL - SEPT. | | AVERAGE 1948-62 |
|---|-----------------------------|-----------|-----------------|
| | APRIL - SEPT. | % AVERAGE | |
| Blue River abv. Green Mt. (10) | 125 | 46 | 274 |
| Colo. River nr Granby (11) | 140 | 60 | 233 |
| Colo. River abv Glenwood Springs (12) | 800 | 51 | 1556 |
| Roaring Fork at Glenwood Springs (14) | 500 | 65 | 762 |
| Williams Fork nr Parshall (15) | 31 | 40 | 77 |
| Willow abv Willow Cr. Colo. nr Cameo (12) | 20 | 42 | 2213 |

- (10) Observed flow plus change in storage in Dillon Reservoir.
 (11) Observed flow plus diversions by Adams Tunnel and Grand River Ditch plus change in storage in Granby Reservoir.
 (12) Observed flow plus the changes as indicated in (11) plus Moffat Ditch.
 (14) Observed flow plus diversions through Twin Lakes Tunnel.
 (15) Observed flow plus diversions through Jones Pass Tunnel.

This Report Prepared by
 Jack N. Washichek and
 Don W. McAndrew
 Soil Conservation Service
 Colorado State University
 Fort Collins, Colorado

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 SOIL CONSERVATION SERVICE

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 Colorado State University
 Fort Collins, Colorado

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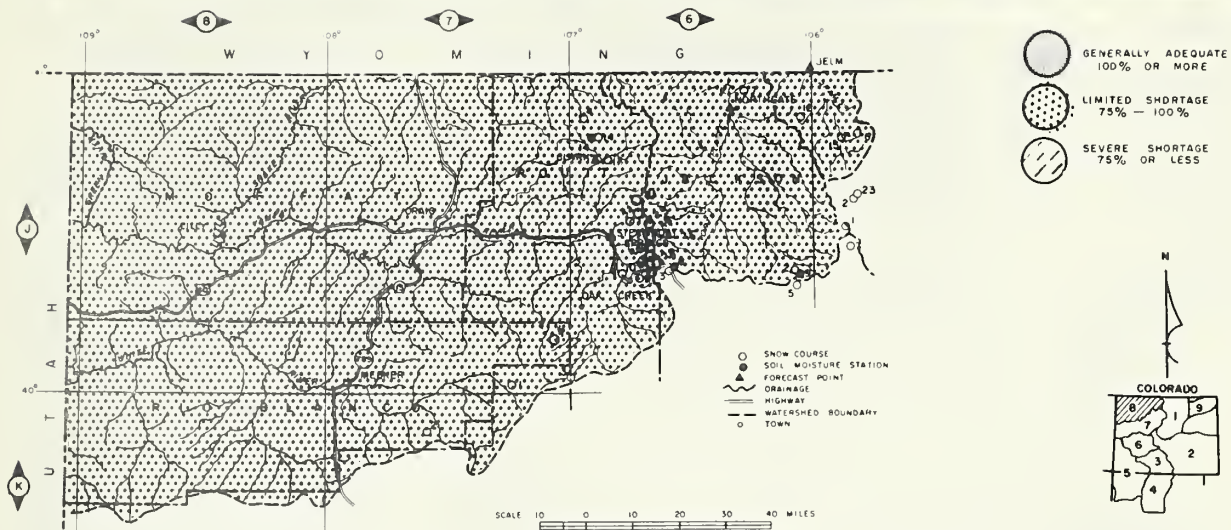
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 U.S. DEPARTMENT OF AGRICULTURE

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
**YAMPA, WHITE, AND NORTH PLATTE
RIVERS WATERSHEDS IN COLORADO**

as of
May 1, 1966

WATERSHED VIII

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The Northwest corner of the state is in for a dry season unless summer rains are numerous. The snow pack over the North Platte Drainage is only 63% of normal, while the Yampa has only 43% of the 1948-62 average. This is the poorest snow cover since 1954. The late season snow storm added snow in a few places, but not enough to help much.

Soil moisture in the high mountain areas is slightly better than last year and a little better than normal, however, it will not be of much help.

Valley soils are reported as fair.

Forecasts are mostly in the 50% category, however, the Elk at Clark is forecasted at 68% of normal.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,
Colorado

J. L. Hall, Area Conservationist,
Glenwood Springs, Colorado

SNOW

| SNOW COURSE | NO. | CURRENT INFORMATION | | | PAST RECORD | |
|---------------------------|------|---------------------|---------------------|------------------------|------------------------|-----------------|
| | | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | |
| | | | | | LAST YEAR | AVERAGE 1948-62 |
| <u>North Platte River</u> | | | | | | |
| Cameron Pass | 5J1 | 4/28 | 55 | 21.9 | 34.3 | 28.1 |
| Columbine Lodge | 6J3 | 4/26 | 25 | 9.6 | 28.6 | 22.9 |
| Deadman Hill (B) | 5J6 | 4/27 | 37 | 13.0 | 19.0 | 18.1 |
| McIntyre (B) | 5J15 | 4/23 | 18 | 5.8 | 13.1 | 10.2* |
| Northgate | 6J7 | 4/29 | 1 | 0.4 | 4.7 | 3.0* |
| Park View | 6J2 | 4/28 | 10 | 3.0 | 8.7 | 6.8 |
| Roach | 6J12 | 4/23 | 47 | 16.4 | 24.0 | 21.0 |
| Willow Creek Pass (B) | 6J5 | 4/28 | 19 | 6.5 | 12.5 | 12.0 |
| <u>Yampa River</u> | | | | | | |
| Bear River | 7J3 | 4/25 | 3 | 1.1 | 10.8 | 8.3* |
| Clark | 6J13 | 4/25 | 0 | 0 | 6.8 | - - |
| Columbine Lodge (B) | 6J3 | 4/26 | 25 | 9.6 | 28.6 | 22.9 |
| Dry Lake | 6J1 | 4/26 | 16 | 6.8 | 22.6 | 17.2 |
| Elk River | 6J4 | 4/25 | 22 | 9.3 | 20.3 | 13.4 |
| Hahn's Peak | 6J14 | 4/25 | 5 | 1.7 | 11.3 | - - |
| Lynx Pass | 6J6 | 4/26 | 4 | 1.6 | 10.8 | 7.8 |
| Rabbit Ears | 6J9 | 4/26 | 37 | 16.1 | 29.6 | 27.9 |
| Yampa View | 6J10 | 4/26 | 3 | 1.3 | 13.1 | 9.7* |
| <u>White River</u> | | | | | | |
| Burro Mountain | 7K2 | 4/26 | 13 | 4.3 | 19.5 | 15.8 |
| Rio Blanco | 7J1 | 4/29 | 0 | 0 | 17.0 | 10.5 |

NOTE: * - 1948-62 (adjusted averages)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by
 Jack N. Washichek and
 Don W. McAndrew
 Soil Conservation Service
 Colorado State University
 Fort Collins, Colorado

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|--------------|----------------|-------------------|-----------|-----------|-------------------------|
| Hahn's Peak | 4/25 | 19.0 | 11.2 | 11.4 | - - |
| Laramie Road | 5/1 | 12.4 | 9.1 | 8.6 | 9.0 |
| Muddy Pass | 4/26 | 11.1 | 11.1 | 6.7 | 8.5 |
| Two Mile | 4/26 | 9.1 | 5.5 | 4.6 | 5.6 |
| Willow Pass | 4/28 | 9.5 | 9.5 | 6.0 | 6.9 |

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

| STREAM AND STATION | APRIL THROUGH SEPTEMBER | | |
|---------------------------|-------------------------|---------------|-----------------|
| | FORECAST | THIS YEAR | |
| | | APRIL - SEPT. | AVERAGE 1948-62 |
| Elk at Clark | 140 | 68 | 205 |
| Laramie at Jelm | 59 | 53 | 112 |
| Little Snake at Lilly | 170 | 53 | 321 |
| North Platte at Northgate | 105 | 40 | 260 |
| White at Meeker | 185 | 56 | 332 |
| Yampa at Maybell | 520 | 56 | 923 |
| Yampa at Steamboat Spr. | 150 | 51 | 292 |

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DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Snow Survey
 Colorado State University
 Fort Collins, Colorado

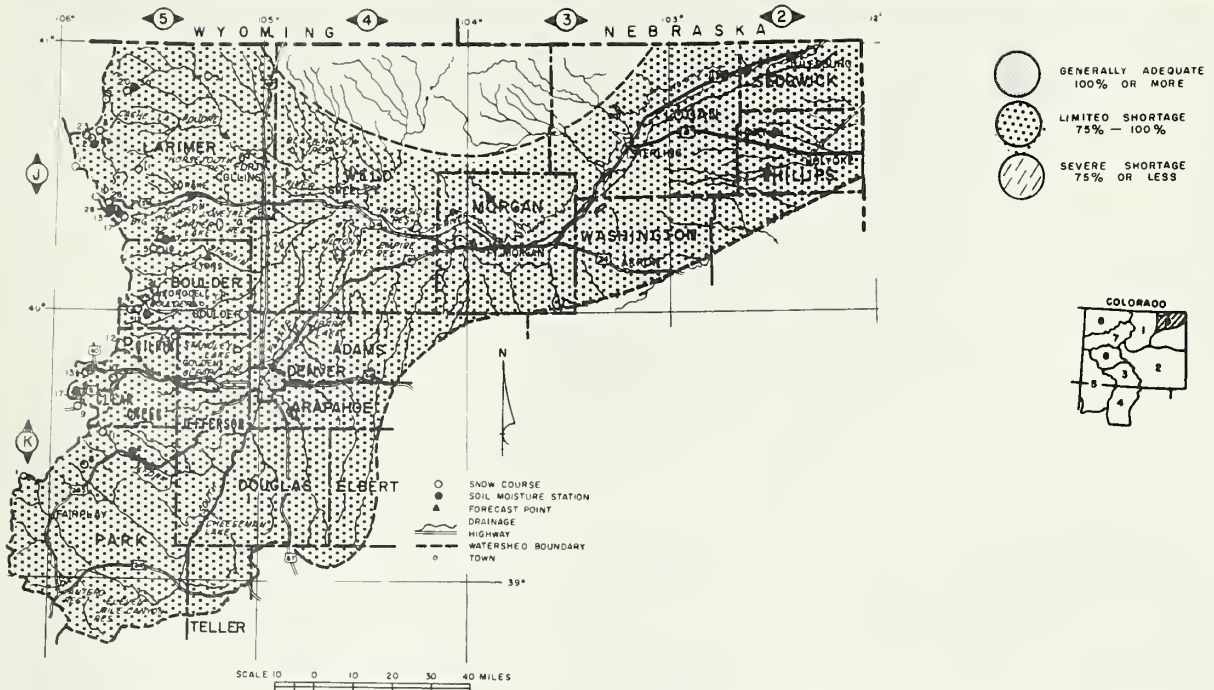
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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of
May 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The South Platte River and its' tributaries have one of the lowest snow packs in recent history. Much of the mountain snow pack has already melted and the high elevation pack is all that remains. The recent snow storm during the third week of April did not improve the mountain snow pack situation. However, it was very beneficial as far as the over-all water supply picture throughout the South Platte valley. Many of the irrigated areas that received the storm will not need to irrigate up the crops. Most of the upper irrigated areas are reporting very good soil moisture while the lower valley around the Sterling area are reporting fair to good soil moisture.

If early season irrigation can be avoided, much precious water can be held in storage until later in the season. This will be an excellent supplement to the river flow.

The streamflow forecasts range from 40% of normal on the St. Vrain to 59% on Boulder Creek.

Much of the success of this year's crop will depend on good and wise use of irrigation supplies and timely rainfall this summer.

Forecasts are based on average precipitation for the remainder of the year.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,
Colorado

Wallace L. Bruce, Area Conservationist
Sterling, Colorado

SNOW

| SNOW | | CURRENT INFORMATION | | | PAST RECORD | |
|----------------------------------|------|---------------------|---------------------|------------------------|------------------------|-----------------|
| SNOW COURSE | NO. | DATE OF SURVEY | SNOW DEPTH (INCHES) | WATER CONTENT (INCHES) | WATER CONTENT (INCHES) | |
| | | | | | LAST YEAR | AVERAGE 1948-52 |
| South Platte River & Tributaries | | | | | | |
| Baltimore | 5K23 | 5/2 | 0 | 0 | 5.6 | - - |
| Berthoud Falls | 5K13 | 4/27 | 29 | 8.4 | 20.6 | 13.8* |
| Big South | 5J3 | 5/1 | 0 | 0 | 0.3 | 0.8 |
| Boulder Falls | 5J25 | 4/29 | 14 | 5.0 | 19.3 | 13.2* |
| Cameron Pass | 5J1 | 4/28 | 55 | 21.9 | 34.3 | 28.1 |
| Chambers Lake | 5J2 | 5/1 | 0 | 0 | 9.6 | 5.5 |
| Copeland Lake | 5J18 | 4/29 | 0 | 0 | 4.0 | 2.3* |
| Deadman Hill | 5J6 | 4/27 | 37 | 13.0 | 19.0 | 18.1 |
| Deer Ridge | 5J17 | 4/28 | 0 | 0 | 4.6 | 3.5* |
| Empire | 5K10 | 5/2 | 12 | 4.2 | 11.9 | 7.1* |
| Geneva Park | 5K11 | 4/28 | 2 | 0.5 | 6.6 | 1.9* |
| Grizzly Peak (B) | 5K9 | 4/28 | 35 | 10.7 | 28.0 | 21.1 |
| Hidden Valley | 5J13 | 4/28 | 25 | 6.9 | 15.1 | 13.6 |
| Hoosier Pass | 6K1 | 4/29 | 23 | 6.0 | 19.8 | 12.9 |
| Hours Glass Lake | 5J11 | 4/28 | 4 | 1.4 | 9.2 | 7.5 |
| Jefferson Creek | 5K8 | 4/29 | 6 | 1.9 | 12.1 | 8.0* |
| Lake Irene (B) | 5J10 | 4/27 | 43 | 12.0 | 29.2 | 24.7 |
| Long's Peak | 5J22 | 5/1 | 21 | 6.5 | 18.2 | 13.4* |
| Lost Lake | 5J23 | 5/1 | 6 | 1.9 | 13.2 | 10.2* |
| Loveland Lift No. 1 | 5K24 | 4/29 | 53 | 15.1 | 34.2 | - - |
| Loveland Pass | 5K5 | 4/28 | 15 | 4.9 | 21.0 | 16.4 |
| Pine Creek | 5J31 | 4/27 | 0 | 0 | 0.2 | - - |
| Red Feather | 5J10 | 4/27 | 3 | 0.7 | 4.1 | 4.9* |
| Two Mile | 5J26 | 4/28 | 38 | 9.8 | 21.6 | 17.8* |
| University Camp | 5J8 | 4/29 | 24 | 8.2 | 27.2 | 24.9 |
| Ward | 5J21 | 4/27 | 1 | 0.4 | 10.7 | 6.0* |
| Wild Basin | 5J5 | 4/29 | 18 | 5.1 | 17.9 | 14.8 |

STREAMFLOW FORECAST (1,000 AC. FT.)

| STREAM AND STATION | APRIL THROUGH SEPTEMBER | | AVERAGE 1946-62 |
|------------------------------------|-------------------------|-------------|-----------------|
| | FORECAST APRIL - SEPT. | THIS YEAR % | |
| Big Thompson at Drake (2) | 50 | 45 | 110 |
| Boulder at Orodell | 32 | 59 | 54 |
| Cache La Poudre at Canon Mouth (1) | 120 | 49 | 246 |
| Clear Creek at Golden (3) | 77 | 57 | 134 |
| Saint Vrain at Lyons | 32 | 40 | 80 |

NOTE: * - 1948-62 (adjusted averages)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by
 Jack N. Washichek and
 Don W. McAndrew
 Soil Conservation Service
 Colorado State University
 Fort Collins, Colorado

- (1) Observed flow minus diversions from Michigan, Colorado and Laramie rivers, plus diversions for irrigation and municipal use above station.
- (2) Observed flow plus by-pass to power plants.
- (3) Observed flow minus diversions through Jones Tunnel.

RESERVOIR STORAGE (1,000 AC. FT.)

| RESERVOIR | USABLE CAPACITY | THIS YEAR | LAST YEAR | 15 YEAR AVERAGE 1948-62 |
|----------------|-----------------|-----------|-----------|-------------------------|
| Carter | 108.9 | 107.3 | 95.4 | 79.0 |
| Cheeseman | 79.0 | 77.2 | 29.0 | 54.3 |
| Eleven Mile | 81.9 | 92.3 | 30.0 | 74.6 |
| Empire | 37.7 | 34.1 | 27.3 | 29.6 |
| Horsetooth | 143.5 | 120.3 | 102.5 | 85.6 |
| Jackson | 35.4 | 34.9 | 32.4 | 34.2 |
| Julesburg | 28.2 | 23.2 | 22.1 | 22.0 |
| Point of Rocks | 70.0 | 72.0 | 47.0 | 61.6 |
| Prewitt | 32.8 | 30.2 | 0 | 21.7 |
| Riverside | 57.5 | 56.1 | 47.7 | 51.0 |

MEASURED FIRST OF MONTH

MEASURED FIRST OF MONTH

SOIL MOISTURE

| STATION | DATE OF SURVEY | CAPACITY (INCHES) | THIS YEAR | LAST YEAR | AVERAGE (ALL PAST DATA) |
|---------------|----------------|-------------------|-----------|-----------|-------------------------|
| Alpine Camp | 4/26 | 6.9 | 4.1 | 5.0 | 4.3 |
| Beaver Dam | 4/26 | 7.3 | 5.2 | 4.4 | 4.7 |
| Clear Creek | 4/28 | 9.5 | 6.4 | 5.7 | 5.9 |
| Feather | 4/29 | 10.1 | 9.4 | 10.1 | 8.1 |
| Guard Station | 5/1 | 6.9 | 4.6 | 3.2 | 4.7 |
| Hoop Creek | 4/26 | 4.9 | 3.5 | 2.8 | 2.9 |
| Hoosier Pass | 4/29 | 7.8 | 6.3 | 4.4 | 5.9 |
| Kenosha Pass | 4/29 | 4.4 | 3.3 | 3.5 | 3.7 |
| Laramie Road | 5/1 | 12.4 | 9.1 | 8.6 | 9.0 |
| Two Mile | 4/26 | 9.1 | 5.5 | 4.6 | 5.6 |

ALL PROFILES 4 FEET DEEP

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DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Snow Survey
 Colorado State University
 Fort Collins, Colorado

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 U.S. DEPARTMENT OF AGRICULTURE

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

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Forest Service
Soil Conservation Service

Department of Interior

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Atomic Energy Commission

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Public Service Company of New Mexico

MUNICIPALITIES

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City of Boulder City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

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Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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SOIL CONSERVATION SERVICE

SNOW SURVEY UNIT

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with the Snow Survey"*